

Remarks/Arguments

The Rejection of Claims 1, 12, and 13 Under 35 U.S.C. 103(a)

The Examiner rejected Claims 1, 12, and 13 as being unpatentable over US Patent No. 5,777,783 (Endou). Applicant respectfully traverses the rejection.

Claim 1

Endou does not suggest or motivate a dynamically tiltable modulator

The Examiner asserts that Endou suggests that rotation of the modulator can be required in a modulation contrast image. The Examiner further states that it would be obvious to make Endou's modulator dynamically tiltable "as suggested by Endou" to allow modulation contrast without the necessity to remove a modulator. The Examiner cites col. 13, lines 6-8 in support. Col. 13, lines 5-15 state: "In observing a modulation contrast image, unlike in observing a phase contrast image, it is necessary to rotate a pupil modulator to adjust the polarity of the contrast of the image. According to this embodiment, since the pupil modulation slider is employed, the modulator can be easily removed from the microscope main body and a whole unit of the modulator can be exchanged with another one. *Since the pupil modulator 26b is detachably provided in the main microscope housing 1, the size of the pupil modulating section is reduced and the operability is improved.*" (emphasis added).

Clearly, Endou has no teaching at all regarding tilting of a modulator. That is, Endou does not suggest making a modulator tiltable, at least because Endou only addresses rotation of a modulator. Rotation and tilting can be independently performed along respective orthogonal axes. Alternately stated, tilting is irrelevant to the rotation taught by Endou.

Endou teaches that a removable modulator is advantageous

In contrast to the Examiner's assertion, Endou has no suggestion that removing a modulator is a problem to be solved. In fact, Endou praises the removability of his modulator and actually espouses the use of a removable modulator. For example, Endou directly states that the detachability of the modulator improves operability.

The Examiner has applied impermissible hindsight

The Examiner states that it would be obvious to make Endou's modulator dynamically tiltable "as suggested by Endou." As shown above, Endou does not teach, suggest, or motivate any type of tilting and even the rotation taught by Endou is not dynamic. Further, Endou does not teach that a detachable modulator is a problem to be solved. Therefore, any suggestion or motivation to tilt a modulator in Endou is derived from Applicant's disclosure. The Examiner must be pushed to a conclusion as to the patentability of Claim 1 by the teachings of the references themselves, or what is known in the art just before the invention was made. The Examiner cannot be drawn to a modification due to careful study of Applicant's disclosure.

Endou does not teach, suggest, or motivate all the limitations of Claim 1. Therefore, Claim 1 is patentable over Endou.

Claims 12 and 13

Claims 12 and 13 recite a dynamically tiltable modulator and the Examiner has applied the arguments for Claim 1 to Claims 12 and 13. Applicant has shown that Claim 1 is patentable over Endou, therefore, Claims 12 and 13 also are patentable over Endou.

Applicant courteously requests that the rejection be removed.

The Rejection of Claims 2, 8, 9, and 11 Under 35 U.S.C. 103(a)

The Examiner rejected Claims 2, 8, 9, and 11 as being unpatentable over US Patent No. 5,777,783 (Endou) in view of U.S. Patent No. 6,687,052 (Wilson et al.). Applicant respectfully traverses the rejection.

Claim 2, 8, and 9

Claims 2, 8, and 9 depend from Claim 1. Applicant has shown that Claim 1 is patentable over Endou. The Examiner asserts that Wilson teaches a greatest possible phase shift. However, even if true, the aforementioned teaching does not cure the defects of Endou with respect to a dynamically tiltable modulator. Therefore, Claim 1 is patentable over Endou and Wilson. Claims 2, 8, and 9, dependent from Claim 1, enjoy the same distinction with respect to the cited references.

Claim 11

Applicant has shown that Endou fails to teach, suggest, or motivate the dynamically tiltable modulator recited in Claim 11. The Examiner asserts that Wilson teaches a greatest possible phase shift. However, even if true, the aforementioned teaching does not cure the defects of Endou with respect to a dynamically tiltable modulator. Therefore, Claim 11 is patentable over Endou and Wilson.

Applicant courteously requests that the rejection be removed.

The Rejection of Claim 3 Under 35 U.S.C. 103(a)

The Examiner rejected Claim 3 as being unpatentable over US Patent No. 5,777,783 (Endou) in view of U.S. Patent No. 6,057,894 (Kobayashi). Applicant respectfully traverses the rejection.

Applicant has shown that Claim 1 is patentable over Endou. The Examiner asserts that Kobayashi teaches a glass layer. However, a glass layer does not cure the defects of Endou with respect to a dynamically tiltable modulator. Therefore, Claim 1 is patentable over Endou and Kobayashi. Claim 3, dependent from Claim 1, enjoys the same distinction with respect to the cited references.

Applicant courteously requests that the rejection be removed.

The Rejection of Claim 10 Under 35 U.S.C. 103(a)

The Examiner rejected Claim 10 as being unpatentable over US Patent No. 5,777,783 (Endou) in view of U.S. Patent No. 6,057,894 (Kobayashi) and further in view of U.S. Patent No. 6,687,052 (Wilson et al.). Applicant respectfully traverses the rejection.

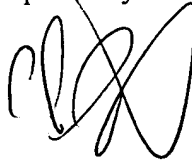
Applicant has shown that Claim 1 is patentable over Endou and Kobayashi and Endou and Wilson. The combination of Kobayashi and Wilson does not cure the defects of Endou with respect to a dynamically tiltable modulator. Therefore, Claim 1 is patentable over Endou and Kobayashi and Wilson. Claim 10, dependent from Claim 1, enjoys the same distinction with respect to the cited references.

Applicant courteously requests that the rejection be removed.

Conclusion

Applicant respectfully submits that all pending claims are now in condition for allowance, which action is courteously requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'C. Paul Maliszewski', written over a horizontal line.

C. Paul Maliszewski
Registration No. 51,990
Simpson & Simpson, PLLC
5555 Main Street
Williamsville, NY 14221-5406
Telephone No. 716-626-1564

Dated: August 9, 2006
CPM/